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ROCKS AND REVELATION.

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WITHIN a few decades have come radical change and thoughtful readjustment of the world's creeds. Truth has been sought and found but it has undergone no change. Petrified platitudes and popular misconceptions have worn away under the droppings of persistent and intelligent investigation. Theologic skeletons have been clothed with flesh and blood and have had breathed into them the breath of truth. Thus vitalized, society finds them busy in transforming the world's activities. Not alone has religious thought felt the touch of on-coming progress. Science too has undergone great change. Nature's story has been better learned and more clearly understood. False theories and visionary speculations have been dissipated as the thrilling record of the rocks and of the stars has been read aright. Much labeled "science" has proved to be classified error. Not alone in the realm of soul and conscience have men misconceived God. They have been scarcely less fortunate in the domain of matter. By showing the falsity of some theories concerning natural laws the atmosphere has been clarified in many things touching revelation. As relates to nature and revelation there can be but one measuring stick. God alone is the inflexible, unvarying standard. Human intellect in its loftiest achievements is feeble, faulty, limited. Infidelity and atheism have seized upon science as a sufficient weapon with which to destroy our faith. Assuming man's capacity to reach a faultless comprehension of nature's laws and methods unbelief would therewith prove revelation untrue. The constant shifting of the bases of scientific research, as new facts and new laws come to light, leads to the conclusion that fallible standards cannot give infallible results. Prove all things and hold fast that which is true is the rule in science

as well as in religion. True science and true revelation cannot disagree. The former deals with God's works ; the latter are his words. Being infinite verity itself, his words and his works cannot be inharmonious. They must agree. Whatever may seem to be in conflict must be but man's faulty reading of the story told by the rocks or by revelation. False theology and scientific misconceptions must pass away. Many have been discarded as the light of investigation has revealed their falsity. It will no more do to cling to some dogma in religion because our fathers lived and died by it, than it will be accounted wise to hold the earth to be flat because for ages the most advanced thinkers were supposed to be able to demonstrate its truth. To accept the pre-Copernican theory of the universe would be to set back many ages the hands on the dial of human intelligence and progress. Can there be certainty in ascertaining truth, then, in either the book of nature or of revelation except in hearts and minds open to conviction, freed from preconceived notions, and as nearly as possible unbiased by environment and education? "Science interpreted is theology; science prosecuted to its conclusions leads to God." When the rocks began to tell their story of creation skeptics and atheists insisted that revelation was in conflict therewith, and therefore false. The trembling saint, ignorant of what science really taught, faltered in his faith. The geologist who saw nothing higher than the rock-written story proclaimed the Mosaic account of the genesis of all things a fabrication. He failed to see the omnipotent finger which made the record. He found a book full of wisdom, of beauty and of goodness without an author. Works of symmetry and of order had come by chance. The seeming antagonism between the rocks and revelation put to the test of scholarship much that is most vital to man. Time and study have made plain the truth and consequent perfect agreement in the words and works of the infinite, infallible Intelligence. It has been easily shown that the Mosaic account of creation and the story of the rocks are not in conflict. Each is supplementary and explanatory of the other. The works of Omnipotence are but object proofs of the thoughts of God in revelation. Both science

and the Bible are, as they ever have been, unsounded seas of knowledge. Even the wisest and greatest have found themselves but schoolboys on the beach picking up here and there a pebble of truth. Our concern, then, is for the truth to be found. Is the Mosaic account true or does geology make it false? If the story of the rocks contradicts the sacred writer he must be wrong. They cannot disagree and both be true. It is of little or no consequence whether Moses wrote the Pentateuch or whether it came through other hands. The later contention of higher criticism is merely scholarly speculation. Moses may have written that which men have made to bear his name, or he may have collated and edited the material from various sources. The settlement of the human authorship is not essential to the development of the truth taught. The vital question is, are these writings true? They exist and the hand that penned them has withered. The record it made stands as the only written history of more than 2000 years of human activity. When the tired traveler seeks a berth in a sleeper he does not stop to discuss whether the car be a Pullman, a Wagner, or a Woodruff. Sleep and rest from the weariness of the long night's travel are his aim. No more are we concerned whether the vehicle of communication be Moses, David, or Solomon. Truth and light are sought. Let the fierce fires of consuming, blinding criticism be quenched, but let there be light. Much of the anathema against Moses is based on mere speculation or lurid imagination. Science cannot even enter the domain occupied in largest part by revelation. Revelation announces truth while science explains its methods. "God created the heaven and the earth," says revelation. Science enters upon the infinite and endless task of explaining how the great work was done. The first chapter of Genesis gives good opportunity, in fact almost the only comprehensive one, of comparing God's words with his works. Here is a realm in which both may operate and be compared. Here also has come severest criticism. What, then, is the testimony of the rocks concerning the truth of this the first chapter in human history? The fact that this record after thousands of years is accepted, though poorly understood even by the wisest, proves that it is more

than mere human writing. As reason widens, as science explores, and as inventive genius gives new facilities, will the sublime truth of this word become more generally accepted, if it be true. The opening sentence of the Bible is vast and limitless in its scope. It transports us beyond time and its record. "In the beginning God created the heaven and the earth." Five conceptions are here contained, each so vast, so illimitable, so incomprehensible as to baffle the profoundest thought of the greatest intellect that ever came to our world. "In the beginning"—who can tell when that was? "God"—what genius can define and comprehend him? "Created"—how can such be? "The heaven"—where and what is it? "The earth"—what man can master it? This single statement is the foundation of all things. No man can define or explain it. Science cannot contradict it. Evolution must accept it, for the ultimate atom which goes into the structure of the lowest form of matter must have been "in the beginning." How could it be unless created by the author of all things? It could not beget itself. The simplest and lowest forms were, therefore, created in the beginning. By evolution these have grown into the higher and more complex until the "heaven" of creation is reached at last. This opening statement of the Mosaic account reaches back beyond time when the earth was without form and void. It goes into futurity to the highest heaven. Its extremes of beginning and termination are like the ends of the rainbow, the finders of which possess the fabulous pots of gold. I quote from a distinguished writer concerning this first statement recorded in human thought. He says: "It is the weightiest sentence ever uttered: it covers all past time, all conceivable space, all known things, all power, all intelligence, and the most comprehensive act of that intelligence and power. It tells of the origin of things, names the originators, states the time of the origin and coördinates all into one great system. The first verse is a statement on nearly all the great problems which now exercise scientists and philosophers. God, creation, eternity, cause, time, space, infinity, force, design, intelligence, will, destiny, universality. There is in it the germ of the whole Bible, as well as the germ of all science and philosophy. Compare

this first verse with the first verse of any history, or biography, or any work of man. These begin with a date, and tell the author's ancestors or some trivial matters. The first verse of Genesis begins very differently ; if nothing else in the Bible is worthy of God this first verse is certainly worthy of him. Had the worlds met at the Almighty's feet to hear him speak, they could have heard him utter no sentence worthier of him in tones of thunder from his infinite throne." In his book *Is Moses Scientific?* Kipp says : "Here is the first word of history, for it begins with the beginning. Here is the first word of philosophy, for we cannot go beyond the first cause. Here is the first word of science, for we cannot go beyond the heaven and the earth."

Before things were was eternity. After earth ceases will be eternity. Time is but the parenthesis thrown in between to explain the eternities. Professor Guyot, in classifying the facts presented by astronomy, biology, and geology, worked out an order of events. When completed he found to his astonishment that he had but set forth essentially the cosmogony of the Bible. This remarkable result but proves the singular unity of truth. Rocks as well as stars, and the science of life, confirm the essentials of revelation. It should be borne in mind that Moses nowhere says that the world was suddenly created ; that it was a solid globe ; nor that all things were made in six days of twenty-four hours each. The long periods necessary to produce the various geologic formations have led to a supposed conflict between the rocks and revelation. When we have read of the days of creation we have thought of periods of twenty-four hours each. Our pigmy days were what misconception read between the lines. These could not be solar days because the sun itself is not spoken of by Moses until the fourth creative day. Even though a conflict were here shown between science and the Bible, there would be little satisfaction in turning to the wise men for definite data. Scientists among themselves only vary some millions of years in their estimates of the various creative or formative periods. Moses is as definite as this. There is a unity in all things. The very word, universe, implies

this, and there cannot be discrepancy or conflict anywhere in God's realm. To say that the Bible is not primarily written as a book of science is but to state a well-recognized truth. Notwithstanding this it may be truly said that the Mosaic record of creation, as given in the first chapter of Genesis, is within the domain of science. It is the "Apostles' Creed" of nature. Is there, then, conflict here between the story of rocks and of revelation? Truth cannot be on both sides of a controversy. One or the other is in error. The church has held to false theologies. Religion has not always given correct interpretations of God's Word. Many of the mistakes of Moses have been found to be false and dogmatic interpretations of revelation, inspired only by tradition and superstition. Much has been read and taught into Genesis that was not written there. Often, too, science has been shown to be false. Rather, supposed science has proved to be classified error and orderly arranged falsehood. Professor Drummond says that a text-book on science is obsolete in ten years. Professor Huxley has declared that the chief duty of science in each generation is to discard the errors of the science of a preceding generation. How, then, can there be claimed for scientific research such infallibility as to destroy this ancient writing? It deals with facts and conditions antedating man and history. As years have passed human science has become more exact, more comprehensive, and its conclusions have grown far more in unison with the great truths of revelation. The rocks speak as plainly of a beginning of matter as does Moses. To view matter as finite implies a Creator. "In the beginning" is no more plainly seen on the page of the book of revelation than it is in the great rock stories of geology. Science divides matter into molecules, and these into atoms. Then, from necessity, it announces that no further division is possible. The atom eludes the keenest scrutiny of the most acute scientific sense. It cannot be weighed or measured. Matter began—so say the rocks, and so says revelation. Here is perfect agreement. How or when it originated neither knows. The method of its subsequent formation into worlds and systems is equally baffling to science and revelation. The latter does

not assume to tell. After ages of evolution of intellect the most and best to be found in science is the nebular hypothesis. She here confesses her weakness. She does not know and merely stands on an assumption. The verdict of science is expressed by Professor Newcomb of Washington Observatory, thus: "At the present time we can only say that the nebular hypothesis is indicated by the general tendencies of the laws of nature; that it has not been proved to be inconsistent with any fact; that it is almost a necessary consequence of the only theory by which we can account for the origin and conservation of the sun's heat." The most that Professor Newcomb here claims is that this theory is *indicated*. Yet this nebular hypothesis is the best, the most exact knowledge that all the world's science and learning can give concerning making and organizing the universe. And yet Professor Mitchell says that this "is the boldest thought ever conceived by the human mind." It is accepted by the scientific world not because it can be *proved*, but because it cannot be *disproved*. The Copernican theory has been demonstrated. The nebular hypothesis remains as unauthenticated as when formulated and announced. Moses tells what was done. Laplace gives an hypothesis, an assumption of how it was accomplished. Surely conflict cannot be here. The latter is the complement of the former. The Mosaic account in no particular renders less probable the theory of nebular formation. Elsewhere, then, if at all, must be found divergence. That Moses was not unscientific is shown in these points: (1) He says there was a first cause; "God created." (2) Matter had a beginning. (3) It is not self-originating; God created it. (4) The true order is the heaven first, and then the earth, the latter not being the center as was long supposed. (5) "The earth was without form and void." This agrees with the nebular hypothesis. (6) Matter was at first fluid. (7) That there was no motion as required by the law of "dissipation of energy." (8) "That for this reason darkness was upon the face of the deep;" that motion did not beget itself. (10) The spirit of God is the source of all motion and force. (11) This force is not in matter, but came from without; "The spirit of God

moved upon the face of the waters," or fluid. (12) The motion imparted was vibratory as by the fluttering of the wings of a bird. These twelve great scientific facts are fundamental to all that follows. Kipp says that "they are as far-reaching as time, as wide as space, as reliable as truth. They are the very core of philosophy; they are the working theories which science may take and use in endless application." Moses put them into a few brief words. The ages since have scarcely been able to read them, much less to comprehend their sweeping import. In the first chapter of Genesis the expression, "And God said," occurs ten times. These may be fitly termed the decalogue of nature. In Exodus are found the ten commandments for man. These have ever been accepted by law-makers and judges, as well as by moralists, as containing the germs of all law, civil and ecclesiastical. In like manner scientist and thinker find in nature's decalogue, as given in the first chapter of human history, all the seeds of scientific and philosophic thought. This does not assume to tell how, but merely what was done in creation. It leaves the process to be explained by science, the younger sister of revelation. The Bible nowhere asserts instantaneous creation. The time when the lowest form of matter came into being is hid with God "in the beginning." From atom and molecule in their original state has come, in various stages of creation and development, man, the summit of creation's lofty edifice. The plans and specifications of the Great Architect were not given to human weakness for review. He spake and it was done. He ordered and it stood fast. Methods, processes, purposes, are God's. Man's work is to see, recognize, and utilize, the achievements of creative energy. One thing is sure, no mistakes were made. Order and perfection are on every hand. No half-finished objects are found to indicate change of purpose or imperfection of design. All is symmetrical, beautiful, complete. The tiniest blade of grass, the humblest grain of sand, or the most stalwart oak, equally shows forth his handiwork and declares his infinite glory. Everywhere it is found that creation has been progressive. First is presented the lower, and successively comes the higher. The

simple, then the more complex, is the order. This dovetails with the stories of the rocks and stars. Crude matter gives basis for all else. So Moses gives creation's order in perfect accord with science. Guyot says: "The fifth and sixth days offer no difficulties, for they unfold the successive creation of various tribes and animals which people the water, the air, and the land, in the precise order indicated by geology." The same is true of the four creative days preceding. Geology fixes the order of the introduction of life. Dana's chart gives it as follows: (1) invertebrates or mollusks; (2) fishes; (3) reptiles; (4) mammals; (5) man. This is the language of the rocks, and exactly agrees with revelation. First, matter; then light; after this, division of sea and land, followed by plant life; then again, fishes, birds, and animals, all leading to the zenith of creation's work—man. His animal and spiritual life wholly depends upon all the preceding stages of preparatory work. Moses presents three distinct and separate acts of creation. All else may have evolved from existing conditions. These are: (1) the beginning of matter; (2) the beginning of life; science and revelation equally condemn spontaneous generation; (3) the beginning of spiritual life. Before this mystery science is dumb. She can neither affirm nor deny. All was made for man, and he for God. The body being material returns to dust; the spirit being eternal goes to God who formed it. Revelation not only stands here, but submits to other tests: (1) It stood the assaults of time. Nothing but truth lasts; all material things perish. The "everlasting hills" are gnawed away by the tooth of time. The Bible stands today time-tested more glorious than ever before. (2) Experience also adds its testimony. Thousands—aye, millions—have tasted its sweets and know, not for others, but for themselves, that it is good and true. (3) Again, it is confirmed by *history*. Ancient history, archaeology, ethnology, and the study of comparative languages, all tell the story of biblical verity. Ancient monuments exhumed, rolls and tablets deciphered, historic places unearthed and mummies coming forth from tombs long forgotten, bringing scrolls in their withered hands, constitute a cloud of witnesses in whose

mouths the truth of revelation is proved. Last of all, but not least, is the proof conclusive from science. Biology, astronomy, ethnology, archæology, join in the story of the rocks to confirm the truth of God's words in revelation. Science is the great search-light penetrating to the inmost recesses of nature's caverns to bring to view the rich treasures long hidden from human eyes. "No longer, with the jealousy and petulance of ignorance, keeping each her own book to herself, revelation and science now, like two loving and beautiful sisters, sit down together and ask each other's aid. Revelation turns over the leaves of the Bible and asks science to help interpret its teachings to men; and science turns over the rocky leaves of nature, and when she has deciphered the hieroglyphics which the divine finger has written upon them, she is surprised and rejoices when revelation shows that they are but pictured illustrations of the same truths contained in the written word." Though we may not see all, or comprehend all, in either the rocks or in revelation, we may feel quite assured that, when we have fully known the truth, the rock-written story will not differ from that written by Jehovah with the finger of man.